

SECTION 5.4 WATER RESOURCES CONTENTS

5.4 WATER RESOURCES.....	5.4-1
5.4.1 Affected Environment	5.4-1
5.4.1.1 Climate and Precipitation	5.4-1
5.4.1.2 Surface Water Resources.....	5.4-1
5.4.1.3 Groundwater Resources.....	5.4-4
5.4.1.4 Water Supply	5.4-4
5.4.2 Environmental Impacts.....	5.4-4
5.4.2.1 Groundwater Impacts.....	5.4-5
5.4.2.2 Surface Water Quality and Flooding Impacts.....	5.4-5
5.4.2.3 Water Supply Impacts.....	5.4-6
5.4.2.4 Wastewater Treatment Impacts	5.4-7
5.4.2.5 Compliance with State Water Policy.....	5.4-8
5.4.3 Mitigation Measures	5.4-9
5.4.4 Significant Unavoidable Adverse Impacts	5.4-10
5.4.5 Cumulative Impacts	5.4-10
5.4.6 Applicable Laws, Ordinances, Regulations and Standards (LORS)	5.4-10
5.4.6.1 Federal Authorities and Administering Agencies.....	5.4-10
5.4.6.2 State Authorities and Administering Agencies	5.4-11
5.4.7 Involved Agencies and Agency Contacts	5.4-11
5.4.8 Permits Required and Permit Schedule	5.4-12
5.4.9 References	5.4-13

List of Appendices

Appendix A Civil Engineering Design Criteria

List of Tables

Table 5.4-1 Permits and Permitting Agencies for TPP Water Resources	5.4-12
Table 5.4-2. Permits Required and Permit Schedule.....	5.4-12

List of Figures

Figure 5.4-1 Surface Water Resources in the Project Vicinity.....	5.4-3
---	-------

5.4 WATER RESOURCES

Water resources potentially affected by construction and operation of the proposed Tesla Power Project (TPP) include groundwater, surface water, water quality, and water uses.

The project site is situated on the eastern edge of the foothills of the Coast Range that generally define the southwestern edge of both groundwater and surface water resources associated with the Sacramento-San Joaquin River Delta (Delta). The Delta area is characterized by a series of natural and man-made stream channels, canals, and drains that form low-lying islands.

Water supply in the Central Sacramento Valley is provided by both surface water and groundwater. Historically, most of the water consumed in the area has been from the surface waters of the Sacramento River, San Joaquin River, and their tributaries, which drain the Sierra Nevada. The significant sustained flow volumes from Sierra snowmelt were recognized early in the development of California and served as the basis for construction of the Federal Bureau of Reclamation's Central Valley Project (CVP) and California's State Water Project (SWP). Both of these water supply systems divert water from Northern California to drier Central and Southern California for agricultural, industrial and municipal water supply.

High-quality surface water resources and groundwater of variable quality characterize the southern Delta area. Both groundwater and surface water are used to meet local domestic and irrigation demands. Locally, shallower wells provide low-quality water to individual domestic users. Deeper wells provide better-quality water to communities and local irrigators.

5.4.1 Affected Environment

5.4.1.1 Climate and Precipitation

The western edge of the Central Sacramento Valley exhibits a relatively mild and temperate climate, with little rainfall. The mean annual precipitation is approximately 17.8 inches. Average annual temperature is 60.6°F and most days are sunny and mild. The summers are dry with warm to hot afternoons and mild nights. Daytime temperatures during the summer months range between 80 and 100, with peak days up to 110°F. The rainy season typically occurs from November through March. January is the wettest month, with an average precipitation of 4.03 inches and July is the driest month, with an average precipitation of 0.05 inches. There is an average of 55 days per year with precipitation. Occasionally, abnormally warm rainstorms during winter periods combined with significant snowpack in the Sierra can create flood flows in the Sacramento River and its tributaries. However, damaging wind or torrential rainfall is rare in the valley itself. Total elevation range on the site is from 360 to 400 feet amsl. Average climatological data are provided in Table 5.2-6 (Section 5.2 Air Quality).

5.4.1.2 Surface Water Resources

The project site has no surface water resources or defined drainages. The nearest surface water resource is Patterson Run Creek, an ephemeral stream approximately 0.2 miles south of the project site (Figure 5.4-1). Patterson Run Creek has a total length of approximately 6 miles and

drains towards the east and flows from the eastern Diablo foothills to the Central Valley where it disperses on the valley floor. The project site is within the drainage area of Patterson Run Creek.

South of the Tesla Substation there is an unnamed ephemeral stream that drains areas south of the substation, toward the east. North of the project site there is an unnamed ephemeral stream that is parallel to Midway Road and drains northeast crossing beneath the California Aqueduct and the Delta-Mendota Canal.

Because of its high quality and ready access, surface water is extensively used in the project area. An estimated 1,700,000 AFY of water from the Delta is diverted by local water users. The most prominent surface water features in the project area are the SWP (California Aqueduct) and the CVP (Delta-Mendota Canal) located approximately 1.3 and 1.6 miles northeast of the project site, respectively. These aqueducts convey nearly 6,000,000 acre-feet per year (AFY) of municipal, industrial, and agricultural water to the southern portion of California and play a significant role in the movement of water throughout the state.

The SWP is operated by the California Department of Water Resources (DWR) on a wholesale basis to provide municipal, industrial, and agricultural water to its contracted customers. The SWP delivers water to two-thirds of the residents of California. Seventy percent of the SWP's use is non-agricultural use. The SWP facilities in the project vicinity include the California Aqueduct, Bethany Reservoir, and Clifton Court Forebay, which is the largest surface water body in the region (see Figure 5.4-1). The Harvey O. Banks (Banks) Pumping Plant moves water from the Clifton Court Forebay through the Skinner fish facility and then into the California Aqueduct. The California Aqueduct is located approximately 1.3 miles northeast of the TPP site.

The CVP, operated by the U.S. Bureau of Reclamation (USBR), supplies water to its agricultural, municipal, and wildlife refuge customers throughout the Central Valley. The CVP transports approximately 20 percent of the state's developed water. The Tracy Pumping Plant moves water from the Delta into the Delta-Mendota Canal (see Figure 5.4-1) which is approximately 1.6 miles northeast of the TPP site.

CVP and SWP operations are controlled by numerous criteria that reflect real-time conditions in the Delta. The criteria for CVP and SWP operations are set forth in the permits issued to contractors by the State Water Resources Control Board (SWRCB), requirements under biological opinions and agreements between the SWP, CVP, and United States Fish and Wildlife Service (USFWS), California Department of Fish and Game (CDFG), and National Marine Fisheries Association (NMFS). The criteria were established primarily to minimize the environmental effects of the CVP and SWP and to avoid interfering with diversions by senior rights. At times, releases from upstream reservoirs are made to enable water diversions from the Delta, while at other times water diversions are reduced to avoid adversely affecting the Delta. The CVP and SWP must operate to meet the conditions of their permits and other environmental requirements.

5.4.1.3 Groundwater Resources

The project site has a water well used for watering cattle on the site. This well was monitored by the DWR from 1959 to 1973 (Well Number 02504E29N01M). During that period, water levels in the well varied from 19 to 21 feet below ground surface (DWR, 2001). A local water supply infrastructure has not been developed in the area. Local residents, agriculture, and other uses obtain their water from private wells.

5.4.1.4 Water Supply

The TPP site is located in the eastern portion of Alameda County within the service area of the Alameda County Flood Control and Water Conservation District (“Zone 7”). At the present time, Zone 7 does not have transmission facilities or other infrastructure in the TPP area (G. Gates, 2001). As part of the construction of the TPP a turnout facility will be constructed on the California Aqueduct near the intersection of Grantline and Midway Road under the supervision of the DWR. A 1.7 mile pipeline, dedicated to the project, will be constructed along Midway Road, south to the project site. Zone 7 will use these facilities to deliver water to the project site.

Under the terms of a Letter of Intent (attached as Appendix M) executed between Midway Power and Rosedale-Rio Bravo Water Storage District (“Rosedale”) in Kern County, Rosedale will provide Zone 7 with a firm, reliable, annual supply of 6,400 acre-feet of water from Rosedale’s supply of local and exportable groundwater and/or surface water supplies. Rosedale will deliver exportable local groundwater and surface water to the new turnout. Delivery to the turnout will be accomplished through an exchange of SWP delivery entitlements among Zone 7, Rosedale, and the Kern County Water Agency (KCWA) with the consent of the DWR. No state water project entitlement water will be transferred and no additional annual diversion into the California Aqueduct will occur.

5.4.2 Environmental Impacts

Potential impacts of the project on water resources are evaluated for the following:

- Groundwater impacts.
- Surface water quality and flood hazards.
- Water supply.
- Wastewater treatment.
- Compliance with State water policy.

Significant impacts are those that would have the following:

- Violate any water quality standards or waste discharge requirements.
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge.

- Substantially alter the existing drainage pattern of the site or create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems.
- Place housing or structures within a 100-year flood hazard area.
- Have insufficient water supplies or insufficient wastewater treatment capacity to serve the project's projected demand.

5.4.2.1 Groundwater Impacts

Activities at the TPP plant site have very little potential to impact groundwater resources. Groundwater beneath the plant site is approximately 20 feet beneath ground surface and groundwater will not be used during project operations. Construction water will be provided from the existing on-site well. Average daily use of construction water is estimated to be about 8,000 gallons. Due to the relatively small amount of water and the brief period of use, construction water withdrawals are not expected to have a significant impact on groundwater resources in the vicinity of the project.

Since storm water runoff from the power plant site will be controlled and properly disposed, no groundwater impacts from TPP operation would be expected. No underground storage tanks are proposed at the power plant site. All aboveground chemical storage tanks will have secondary containment structures and the potential for release is considered remote. Any spills that do occur will be immediately cleaned-up by trained individuals. Solid wastes and small amounts of hazardous waste will be generated by the project, however, these wastes will be properly handled and disposed offsite using licensed transporters (see Section 5.13).

The TPP will employ approximately 36 people during operation. Sanitary wastes from the Administration Building will be conveyed to a county approved septic tank system. No adverse impacts to groundwater are anticipated from the operation of the sanitation system.

TPP will not deplete groundwater supplies or significantly interfere with groundwater recharge. The design of the stormwater retention basin allows for groundwater percolation of water collected from the uncontaminated power plant site areas. Also, as previously indicated, most of the project site will be restored to grassland areas after construction is complete. Therefore, no significant impacts to groundwater are expected from the construction or operation of the TPP.

5.4.2.2 Surface Water Quality and Flooding Impacts

Approximately 25 acres of land associated with the power plant site will be permanently utilized. Another 40 acres at the project site and the adjacent construction laydown area will be temporarily used during construction (see Table 3.7-4). Best Management Practices (BMPs) and a Storm Water Pollution Prevention Plan (SWPPP) will be implemented to assure no significant increase in erosion from construction activities. Additionally, erosion and sediment controls, surface water pollution prevention measures, and other BMPs will be developed and implemented for both construction and operational phases. These plans will be

prepared in accordance with the storm water discharge permit requirements of the Regional Water Quality Control Board (RWQCB).

All chemical storage tanks at the plant site will be located in secondary containment areas to control accidental spills and leaks. All refueling operations and maintenance of construction equipment will be performed only in designated lined and/or curbed areas. A spill contingency plan will be prepared for handling of all chemicals and wastes generated at the site. Storm water runoff from the curbed portions of the site (with potential for oil contamination) will be collected and routed through an oil-water separator. This separated water will be transferred to the wastewater collection tank for treatment in the zero discharge system. Thus, there would be no surface discharges of storm water runoff from the curbed portions of the generating facility and therefore no impacts to surface water quality are expected.

The design of the facility will conform to the Alameda County Hydraulics and Hydrology Criteria Summary as stated in Appendix A (Foundations and Civil Engineering Design Criteria). Surface drainage systems will be designed to handle the flow resulting from a 10-year, 24-hour duration rainfall event. The surface drainage systems will also be designed to prevent flooding of permanent plant facilities.

The plant site is located at an elevation of 360-400 ft. amsl and is not within a flood hazard zone as defined by the Federal Emergency Management Agency (FEMA, 2001).

The project will not substantially alter the existing drainage pattern of the site or create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems. The project will not place housing or structures within a 100-year flood hazard area. Therefore, the project will not have a significant impact to surface water quality and flooding impacts.

5.4.2.3 Water Supply Impacts

TPP's use of water from Rosedale will have no significant adverse impact on water supply because it will utilize water that Rosedale has previously banked for future sale, and/or water that would otherwise be banked in the future.

As a member of the KCWA, Rosedale has a contractual entitlement for SWP water of 29,900 AF annually. Water supplies available to Rosedale also include an annual block of 10,000 acre-feet from the Kern River under a contract with the City of Bakersfield. In addition, Rosedale has historically received one-third of the City's miscellaneous Kern River water, which averages 22,000 acre-feet per year. Rosedale also periodically receives water from the federally operated Central Valley Project (CVP) from the CVP's Friant-Kern Division.

Rosedale operates recharge facilities, including channels and basins that have a total wetted area of about 720 acres and an average long-term recharge capacity of about 255 cfs. Rosedale plans to develop approximately 100 additional acres as groundwater recharge basins on property that it currently owns. It is anticipated that this will increase the District's average long-term recharge capacity by about 50 cfs. The District is also a recharge participant in the

Pioneer Project, and as such has first priority to 25 percent of the total recharge capacity. This provides the District with an additional 50 cfs of recharge capacity.

In addition to natural recharge, Rosedale acquires water for recharge purposes from the Kern River through a water service agreement with the City of Bakersfield, from the Friant-Kern Canal of the Central Valley Project as available, and from the State Water Project through a water supply contract with the KCWA. Because water supplies available to Rosedale include an average of 32,000 acre-feet per year of Kern River water, Rosedale has accumulated approximately 170,000 acre-feet of locally developed exportable banked water. This water has been obtained by Rosedale during the years 1995 through 2000 through water purchases and exchanges with other entities.

Rosedale recently certified a "Master Environmental Impact Report – Groundwater Storage, Banking, Exchange, Extraction Conjunctive Use Program" (Rosedale, 2000). The groundwater banking program identified in the Master EIR will include projects that involve the conjunctive use of the surface and groundwater resources of Rosedale for the purpose of increasing water supplies and generating revenue for the benefit of Rosedale's landowners. Rosedale's groundwater banking program is intended to provide the means by which Rosedale can maintain a balanced water supply. It is anticipated that Rosedale's projects under this program, when completed, could include over 300,000 acre-feet of stored water for the purposes of extraction during water short or drought periods. It is estimated that the storage of 300,000 acre-feet would occupy a depth of approximately 50 feet in the groundwater basin underlying the 43,000 acres of the district, based on an average specific yield of 14 percent. Currently, the depth to groundwater in Rosedale averages about 140 feet. Rosedale has designated a banked water supply of approximately 36,300 acre-feet for the purpose of initiating this program.

The Rosedale Master Environmental Impact Report (Rosedale, 2000) also shows that District supplies consistently exceed use. For example, for the period from 1995 through 2000, average annual net District supply was 111,885 AF, while average annual use was 98,969 AF. Therefore, sale to TPP of 6,400 AFA will not adversely affect water supplies in Rosedale.

5.4.2.4 Wastewater Treatment Impacts

The proposed plant design incorporates a zero discharge system, so there will not be any impacts to surface water resources from plant operations except as outlined below (see also Section 3.4.7 Waste Management).

There are two main wastewater streams during project operation:

- Storm water runoff from the project site will be routed through a detention pond designed to retain silt and prevent impacts to water quality of the off-site natural drainages.
- Sanitary wastes will be directed to an on-site leach field designed to handle the sanitary wastes generated during project operation. The daily maximum amount of discharge to the septic system is approximately 7,200 gpd.

A permit from the Alameda County Department of Health would be required for installation of the septic system to ensure proper design considerations. No adverse impacts to groundwater are anticipated from the operation of the septic system.

The project will not require the construction of new wastewater treatment facilities or expansion of existing facilities. The project will not violate any water quality standards or waste discharge requirements. Good engineering practices and BMPs will be employed in the project design and operation. Therefore, no significant impacts resulting from wastewater treatment are expected during construction or operation of the proposed facility.

5.4.2.5 Compliance with State Water Policy

State of California Water Resources Control Board Resolution 75-58. In 1975, the State of California Water Resources Control Board (SWRCB) issued a policy on the use and disposal of fresh inland surface waters used for power plant cooling (Resolution No. 75-58). The policy contains the following principles:

- **Source Priority:** The SWRCB policy regarding the use of fresh inland waters for power plant cooling expresses prioritized preferences for the sources of cooling water used by power plants (Resolution No 75-58). Before concluding that it is necessary to use banked groundwater from Rosedale for the TPP, MPL evaluated other potential sources of water based on SWRCB policy to determine whether these sources would be environmentally desirable and economically sound. See Section 3.10.5 – Water Supply Alternatives. The analysis concluded that alternative sources of cooling water are either not available, or environmentally undesirable or economically unsound.
- **Discharges:** The discharge of blowdown water from cooling towers must not cause a violation of water quality objectives or waste discharge requirements established by Regional Boards. TPP blowdown water in the cooling towers will be recirculated approximately 20 times before being routed to the zero liquid discharge system. From the ZLD system most of the water is returned to the cooling towers, either directly or indirectly, resulting in minimization of overall project water requirements. TPP is in compliance with this policy because the project system will not cause a violation of water quality objectives or waste discharge requirements.

Monterey Agreement. This Agreement, signed in 1994, provides a mechanism for the allocation of SWP water based upon entitlements during water-short years on an equal basis for urban and agricultural purposes. This protects the delivery by exchange. Rosedale, KCWA, and Zone 7 currently operate under this agreement. Rosedale and Zone 7 will provide for obligations and responsibilities under this agreement in an exchange agreement to be executed between the parties. In the event that agricultural use becomes subordinate to urban use in water short years, Rosedale will supply water to the TPP under an exchange agreement with a third party thereby drought-proofing their delivery obligation.

CALFED Bay-Delta Program. The CALFED Bay-Delta Program is a combined state-federal-stakeholder effort to develop a comprehensive long-term plan to restore ecosystem health and improve water management for beneficial uses of the San Francisco Bay-Delta system. Water for the TPP will be supplied by Rosedale which has an entitlement of 29,000 acre-feet per year of SWP water originating in the Delta. Historically, Rosedale has taken its full allocation of SWP Entitlement and either banks or sells the water to its customers. This practice will continue with or without the TPP. New water allocations will not be required for the project nor will the TPP require an increase in pumping at the Banks pumping plant. Therefore, the TPP will not cause any impact to Delta outflow and Delta water quality objectives under the Calfed Bay-Delta Program.

California Water Conservation Policy. California Water Code, Section 461 requires all water users to conserve and reuse available water supplies to the maximum extent possible. The TPP will comply with this water conservation policy by utilizing a zero liquid discharge system. Under the proposed system, cooling water will be cycled through the system approximately 20 times, blowdown water from the HRSG in the cooling tower will be cycled through the system approximately 100 times. This cooling method significantly reduces the quantity of water that must pass through the system in contrast to a once-through cooling system.

5.4.3 Mitigation Measures

The TPP is not expected to result in significant adverse environmental impacts to water resources; therefore, mitigation measures are not required. Nonetheless, the Applicant proposes to implement the measures below to reduce impacts to water resources in areas affected by the proposed project, including the plant site, transmission lines, pipelines, and ancillary facilities. Additionally, the measures specified in Section 5.6 (Agriculture and Soils) will be implemented to minimize impacts to the soil resources, erosion control, and associated water quality-related impacts. The following mitigation measures are proposed:

- Design site drainage plans will be in conformance with the Alameda County Hydrology Manual and local ordinances.
- Provide appropriate storm water drainage for the plant site to minimize soil erosion and sediment transport associated with runoff from the site.
- Perform construction activities at the plant site in accordance with the SWPPP and associated Monitoring Plan, which will be required for the project in accordance with the California NPDES General Permit for Storm Water Discharge Associated with Construction Activity. The SWPPP will include Best Management Practices to control erosion, sediment transport, and discharge of pollutants during construction..
- During construction of pipelines and transmission lines, utilize existing roads as much as possible to limit disturbance. Implement BMP to control soil erosion. Design and locate foundations and pipeline stream crossings in accordance with the Alameda County Hydraulics and Hydrology Criteria Summary and local ordinances.

5.4.4 Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts will occur to water resources due to construction or operation of TPP.

5.4.5 Cumulative Impacts

If the TPP receives CEC approval and is constructed and operated, its water use would be an average 5,066 AF/yr (see Table 3.4-9). Zone 7 would divert water from the California Aqueduct and deliver it to the TPP at the turnout. However, because of the exchange agreement between Zone 7 and Rosedale as described in Section 5.4.2.3, such surface water delivery would cause a like release of banked groundwater by Rosedale. Because water supplies available to Rosedale include an average of 32,000 acre-feet per year of Kern River water and Rosedale has accumulated approximately 170,000 acre-feet of locally developed exportable banked water, no significant cumulative impacts to either surface water or groundwater are expected. The TPP will not require any additional allocations of SWP water to either Zone 7 or KCWA. The TPP will not use local groundwater at the TPP site and therefore would cause no adverse impacts to groundwater resources in the area of the TPP site. The water available for storage, banking, exchange, transfer, extraction, and conjunctive use under Rosedale's banking program would be used beneficially with or without the TPP's purchase from the banking program. The water would come from the existing sources, and under the banking program, transfer and exchange of this water would occur with Rosedale's contractors. Use of water from Rosedale at the TPP site, therefore, does not represent an increase in water withdrawals from the natural environment and water would remain available in groundwater aquifers, wetlands, riparian corridors, and to habitat communities and species as under current conditions and therefore would cause no adverse impacts to groundwater resources. Construction and operation of the TPP will not contribute to significant adverse cumulative impacts to groundwater resources in the Rosedale area.

The construction of the project would increase stormwater runoff due to packed earth and gravel, and/or site pavement. The impacts of the increased runoff will be mitigated through the use of a stormwater detention pond designed to maintain the discharge of stormwater at or below the pre-construction flow rates. No cumulative impacts are expected from stormwater runoff.

5.4.6 Applicable Laws, Ordinances, Regulations and Standards (LORS)

Design, construction and operation of the TPP including transmission lines, pipelines, and ancillary facilities will be conducted in accordance with all LORS pertinent to water resources. The following LORS are applicable or potentially applicable to the proposed project in the context of water resources.

5.4.6.1 Federal Authorities and Administering Agencies

Clean Water Act of 1977 (including 1987 amendments) § 402, 33 USC § 1342; 40 CFR Parts 122 - 136. The Clean Water Act requires a general construction activities permit for discharge of storm water from construction sites disturbing five acres or more. The Act also requires a general storm water permit for operation.

Clean Water Act of 1977; 40 CFR Parts 112 and 125. The Clean Water Act authorizes EPA to regulate the discharge of point-source pollutants into surface waters via NPDES permits and pretreatment standards. These regulations also establish requirements for Spill Prevention, Control, and Countermeasures (SPCC) Plans for facilities handling large quantities of oil products.

5.4.6.2 State Authorities and Administering Agencies

The California Porter-Cologne Water Quality Control Act 1998; California Water Code § 13000 - 14957; Division 7, Water Quality. The Porter-Cologne Water Quality Control Act authorizes the state to develop and implement a statewide program for the control of the quality of all waters of the state. The Act establishes the state board and each regional board as the principal state agencies with primary responsibility for the coordination and control of water quality.

The administering agency for the above authority is the CEC, State Water Resources Control Board, and the Regional Water Quality Control Board, Central Valley Region.

California Water Code § 461; California Constitution, Article 10 § 2. This article prohibits the waste or unreasonable use of water, and regulates the method of use and method of diversion of water.

The administering agency for the above authority is the State Water Resources Control Board.

State Water Resources Control Board, Resolution 75-58. The Board prescribes state water quality control policy on the use and disposal of inland water used for power plant cooling. It establishes an order of priority for power plant cooling and prescribes that the use of water for power plant cooling analyze the impact on Delta outflow and Delta water quality objectives, and stipulates that the discharge of blowdown water from cooling towers must not cause a violation of water quality objectives or waste discharge requirements.

The administering agencies for the above authority are the State Water Resources Control Board and the CEC.

California Public Resources Code § 25523(a), 20 CCR §§ 1752, 1752.5, 2300 - 2309, and Chapter 2 Subchapter 5. Article 1, Appendix B, Part (1). The code provides for the inclusion of requirements in the CEC's decision on an AFC to assure protection of environmental quality and requires submission of information to the CEC concerning proposed water resources and water quality protection.

The administering agency for the above authority is the CEC.

5.4.7 Involved Agencies and Agency Contacts

Table 5.4-1 presents information on required water resources permits and agency contacts for the TPP project.

Table 5.4-1 Permits and Permitting Agencies for TPP Water Resources

Agency/Address	Contact/Telephone	Permits/Reason for Involvement
Alameda County 339 Elmhurst St. Hayward, CA 94544	Robert Hale 510/670-5563	County Stormwater Requirements
Alameda County Flood Control and Water Conservation District (Zone 7) 5997 Parkside Drive Pleasanton, CA	Dale Meyers, General Manager Vincent Wong, Asst. General Mgr. 925/484-2600	Water Supply
Alameda County Grading Department 339 Elmhurst St. Hayward, CA 94544	Gary Moore, Grading Supervisor 510/670-5402	County Grading Permit
California Department of Water Resources P.O. Box 942836 Sacramento, CA 94236	Curtis Spencer, Chief, Water Contract Negotiation and Administration 916/653-5945	Water Supply Exchange Agreement; Construction of Delivery Facilities
CVRWQCB 3443 Routier Sacramento, CA 95827-3003	Leo Sarmiento 916/255-3049	Construction Activity NPDES Stormwater Permit
CVRWQCB 3443 Routier, Suite A Sacramento, CA 95827-3003	Sue O'Connell 916/255-3000	General Industrial NPDES Stormwater Permit
Rosedale-Rio Bravo Water Storage District 849 Allen Road Bakersfield, CA 93302	Hal Crossley General Manager	Water Supply

5.4.8 Permits Required and Permit Schedule

Agency-required permits and permit acquisition schedules related to water resources are summarized below in Table 5.4-2. Agencies will be contacted to obtain the necessary permits at the appropriate time.

Table 5.4-2. Permits Required and Permit Schedule

Permit/Approval Required	Schedule
Grading/Erosion Control Permit	30 days prior to start of construction activities.
Plumbing Permit for Septic Tank and Leachfield	30 days prior to start of construction activities.
NPDES General Permit for Storm Water Discharges Associated with Construction Activities	Submit application 30 days prior to start of construction.
NPDES General Permit for Storm Water Discharges Associated with Industrial Activities	Submit application 30 days prior to start of operation.

5.4.9 References

California Department of Water Resources (DWR). 2001. <http://well.water.ca.gov>.

Federal Emergency Management Agency (FEMA). 2001. Flood Insurance Rate Maps, unincorporated areas of Alameda County. FEMA Q3 Flood Data (<http://www.esri.com>)

Gates, Gerry. Zone 7 Water Agency. 2001. Personal Communication with Rick Booth, Foster Wheeler Environmental Corporation. June 13.

Rosedale – Rio Bravo Water Storage District. 2000. Master Environmental Impact Report – Groundwater Storage, Banking Exchange, Extraction Conjunctive Use Proposal Certified May 13, 2001.